

(2) Amended Claims

1. (Cancelled)
2. (Cancelled)
3. (Currently amended) A method according to claim ~~1~~ 13 or ~~2~~ 14, ~~characterised in that~~
further comprising the step of:
 - a) providing an expansion element in the form of a hollow profile in each joint between consecutive first and second pipe elements of the pipeline, said hollow profile being filled with a pressure-resistant fluid, and
 - b) measuring the deformation in each joint ~~is measured in all joints (70).~~
4. (Cancelled)
5. (Currently amended) A method according to ~~any~~ either of claims ~~1~~ 13 or ~~2~~ 14, characterised in that ~~an~~ said expansion element ~~(44)~~ is divided into sections and the fluid pressure ~~(p)~~ of each sections is measured and individual fluid quantities are supplied to or extracted from sections by control command corresponding to the fluid pressure measured for the sections.
6. (Currently amended) A method according to claim 5, characterised in that a header piece ~~(30)~~ is controlled with a front expansion element ~~(44)~~.
7. (Cancelled)
8. (Currently amended) A method according to ~~any~~ either of claims ~~1~~ 13 or ~~2~~ 14, characterised in that the fluid pressure ~~(p)~~ is measured in an expansion element ~~(44)~~ which in cross-section is circular, oval, elliptical or round in the direction of at least one face ~~(42)~~ of the pipe element ~~(18)~~.

9. (Currently amended) A method according to ~~any~~ either of claims 1 13 or 2 14, characterised in that the ratio of force exerted (~~K₁~~) on pipe elements by the expansion element to force permitted (~~K₂~~) for said pipe elements is calculated and monitored periodically or continuously, and when

$$\frac{K_1}{K_2} \geq 1$$

an alarm is triggered.

10. (Currently amended) A method according to ~~any~~ either of claims 13 1 or 2 14, characterised in that parameters are measured on pre-compression of the expansion element (~~44~~) in pressing shaft (~~12~~) and the measured values of the parameters are stored.
11. (Currently amended) A method according to ~~any~~ either of claims 1 13 or 2 14, characterised in that calculation of values and comparing with stored values or converting into control commands take place in real time.
12. (Currently amended) A quality control method comprising: performing the steps according to claim 1 13 to obtain records, qualitatively or quantitatively evaluating the records and implementing quality control based on the evaluation.
13. (New) A method for determining a propulsion force that is effective in a predetermined pipe element of a pipeline during advancing said pipeline by a pressing device resting on an abutment and pushing the entire pipeline in the advance direction by a length of at least one pipe element comprising the steps of:
- a) measuring a fluid pressure in an expansion element in the form of a hollow profile provided in a joint between said predetermined pipe element and a further pipe element, said hollow profile being filled with a pressure-resistant fluid,

- b) measuring a deformation of said joint by at least three local expansion measurements,
 - c) calculating geometric data of an expansion plane of said joint from said at least three local measurements, and
 - d) determining size and eccentricity of the propulsion force in relation to a neutral axis or to an advance direction from said measuring of the fluid pressure and from the geometric data of the expansion plane.
14. (New) A method for producing a pipeline of pipe elements in ground, comprising the steps of
- a) providing a pressing device resting on an abutment and pushing the entire pipeline in the advance direction by a length of one pipe element,
 - b) providing an expansion element in the form of a hollow profile in a joint between a first and a second pipe element of the pipeline, said hollow profile being filled with a pressure-resistant fluid,
 - c) measuring a fluid pressure in said hollow profile,
 - d) measuring a deformation of said joint by at least three local expansion measurements,
 - e) calculating geometric data of an expansion plane of said joint from said at least three local measurements,
 - f) determining size and eccentricity of a propulsion force that is effective in said pipe element during advancing said entire pipeline, said size and eccentricity being determined in relation to a neutral axis or to an advance direction from said measuring of the fluid pressure and from the geometric data of the expansion plane.

15. (new) A method according to claim 14, comprising the step of: comparing said size and eccentricity of the propulsion force with stored standard values to avoid a risk of damage of pipe elements.